

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

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OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

Dr. Jill Lewandowski (VAM-OEP)
U.S. Department of the Interior
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, VA 20166

Dear Dr. Lewandowski:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the Bureau of Ocean Energy Management's (BOEM) final Programmatic Environmental Impact Statement (PEIS) on the Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2017 to 2022 (CEQ No. 20160279). The Secretary of the Interior has identified Alternative C (Reduced Proposed Action) as the preferred alternative. This alternative includes the exclusion of the Beaufort Sea and the Chukchi Sea Program Areas from the 2017 – 2022 Program while maintaining the proposed ten lease sales in the Gulf of Mexico and one lease sale in the Cook Inlet. No lease sales are proposed for the Pacific or Atlantic OCS.

The analysis in the final PEIS includes both the estimated greenhouse gas (GHG) emissions from consumption and onshore processing of oil and gas products as well as GHG emissions from offshore exploration, development, and production. This addresses an important EPA concern with the draft PEIS, and we appreciate BOEM providing this useful information to decisionmakers and the public on important indirect impacts caused by the program. Additional technical comments for the record, BOEM's consideration in the record of decision, and for future iterations of the BOEM technical report on GHGs referenced in the final PEIS are enclosed for your consideration.

Thank you for the opportunity to comment on the final PEIS and we look forward to working with you in the future on the OCS program.

Sincerely,

Robert Tomiak

Director

Office of Federal Activities

Enclosure

## EPA Technical Comments Final Programmatic EIS BOEM OCS Oil and Gas Leasing Program, 2017-2022

- EPA notes that, contrary to the information in Table 4.2-4, the US INDC does not include commitments for 2020 or 2050. The INDC covers only 2025. Further, the US INDC does not have a commitment to tonnages or tonnage reductions; it is in terms of percent. The tonnage numbers in the table for 2025 appear to not represent the actual US INDC. Additionally, the title of Table 4.2-4 is incorrect in stating GHG reduction commitments in metric tons.
- e BOEM acknowledges its current modeling approach does not take into account a number of reasonable assumptions regarding policy changes which could affect the amount of GHG's released from oil and gas activity. We encourage BOEM, in future iterations of its technical report on GHG emissions (Wolvovsky and Anderson 2016), to include a scenario, or scenarios, where they meaningfully address and analyze potential climate policy drivers and the impacts that would have on the OCS leasing program. For instance, BOEM might consider a U.S. scenario for petroleum demand consistent with the U.S.'s Mid-Century Strategy Report, paired with a global demand scenario drawn from the IEA -- likely the 450 Scenario from the World Energy Outlook or the similar 2 Degree Scenario from the Energy Technology Perspectives.

Furthermore, we encourage BOEM in future iterations of this report to evaluate the potential influence of other economic factors on the market and emissions effects of the leasing program, factors which include more or less responsiveness of oil and natural gas demand to changes in total supply and the ease of substitution between oil and natural production from OCS areas and production elsewhere.

- The FEIS references the social cost of carbon that was presented in the technical report on GHG emissions but does not include it in the benefit cost analysis. Instead, BOEM applies the SC-CO2 estimates to value CO2 emission impacts in the technical report. While BOEM's application of the SC-CO2 estimates to value CO2 emission impacts is generally consistent with the interagency working group's guidance, the valuation of non-CO2 emission changes is not. Rather than applying the SC-CH4 and SC-N2O values to CH4 and N2O, respectively, BOEM adjusted all GHG emissions to CO2-equivalent, using Global Warming Potential (GWP), and then applied the SC-CO2. This is not consistent with the interagency guidance. EPA recommends future reports show a breakout of emission impacts by gas. In addition, EPA recommends that BOEM use the interagency working group's SC-CH4 and SC-N2O estimates to monetize the non-CO2 impacts rather than using the GWP approximations.
  - While BOEM's net benefits analysis includes a component which calculates incremental environmental and social costs of OCS production and energy substitutes, it does not incorporate the social cost of carbon. EPA recommends that the ROD include an explanation for why any impacts that are monetized (in this case, the GHG related social costs) were not specifically included into the FEIS. We also note, for the reasons included in the Interagency Working Group on the Social Cost of Greenhouse Gases' Technical Support Document (IWG 2016) and Response to Public Comments (IWG 2015), that the SCC can be usefully applied in domestic benefit cost analysis. See, IWG 2016, p. 17, available online at <a href="https://www.epa.gov/sites/production/files/2016-12/documents/sc\_co2\_tsd\_august\_2016.pdf">https://www.epa.gov/sites/production/files/2016-12/documents/sc\_co2\_tsd\_august\_2016.pdf</a> and IWG 2015, pp. 30-32, available online at <a href="https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf">https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf</a>.